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10/814,431	03/30/2004	Alexei Kojenov	SJO920030085US1	5731

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EXAMINER
DAYE, CHELCIE L

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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

krvuspto@ipmatters.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _16 June 2010_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-3,5,6,10-12,37-41,45-52 and 56-59_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-3,5,6,10-12,37-41,45-52 and 56-59_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This action is issued in response to applicant's RCE filed April 13, 2010.

2.   Claims 1-3, 5-12, and 37-59 are presented. No claim added and claims 4, 7-9,

13-36, 42-44, and 53-55 are cancelled.

3.   Claims 1-3, 5-6, 10-12, 37-41, 45-52, and 56-59 are pending.

4.   Applicant's arguments filed April 13, 2010, have been fully considered but they

are not persuasive.

Continued Examination Under 37 CFR 1.114

5.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 13,

2010 has been entered.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

7.   Claims 1, 37, 48, and 59 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application

was filed, had possession of the claimed invention. More specifically, newly amended

claims 1, 37, 48, and 59 recite "using an operating system, using the target file

containing the image data as a file instead of a volume so that the target file is not

operated as a volume by an operating system", and "using an operating system,

operating the target volume as a volume, including locating said user files in said target

volume using said file system of said target volume so that the target volume is

operated as a volume instead of a file by an operating system"; wherein the examiner is

unable to find support within the specification for such limitations. Especially wherein the

target file is used as a file instead of a volume and operating the target volume as a

volume instead of a file.

8.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

9.   Claims 1, 37, 48, and 59 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

Claims 1, 37, 48, and 59 are rejected under 35 U.S.C. 112, second paragraph,

for having negative limitations, which are not clearly pointed out within the description.

Specifically, the claims recite the limitations "using an operating system, using the target

file containing the image data as a file instead of a volume so that the target file is not

operated as a volume by an operating system", and "using an operating system,

operating the target volume as a volume, including locating said user files in said target

volume using said file system of said target volume so that the target volume is

operated as a volume instead of a file by an operating system". The current view of the

courts is that there is nothing inherently ambiguous or uncertain about a negative

limitation. So long as the boundaries of the patent protection sought are set forth

definitely, albeit negatively, the claim complies with the requirements of 35 U.S.C. 112,

second paragraph. Some older cases were critical of negative limitations because they

tended to define the invention in terms of what it was not, rather than pointing out the

invention. Thus, the court observed that the limitation "R is an alkenyl radical other than

2-butenyl and 2,4-pentadienyl" was a negative limitation that rendered the claim

indefinite because it was an attempt to claim the invention by excluding what the

inventors did not invent rather than distinctly and particularly pointing out what they did

invent. In re Schechter, 205 F.2d 185, 98 USPQ 144 (CCPA 1953). A claim which

recited the limitation "said homopolymer being free from the proteins, soaps, resins, and

sugars present in natural Hevea rubber" in order to exclude the characteristics of the

prior art product, was considered definite because each recited limitation was definite.

In re Wakefield, 422 F.2d 897, 899, 904, 164 USPQ 636, 638, 641 (CCPA 1970). In

addition, the court found that the negative limitation "incapable of forming a dye with

said oxidized developing agent" was definite because the boundaries of the patent

protection sought were clear. In re Barr, 444 F.2d 588, 170 USPQ 330 (CCPA 1971).

Any negative limitation or exclusionary proviso must have basis in the original

disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation, which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention. A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form. Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A

claim in dependent form shall be construed to incorporate by reference all the limitations

of the claim to which it refers. Corrections are required.

Claim Rejections - 35 USC § 101

10.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

11.   Claims 37-41 and 45-47 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. In particular, the claims discuss an

"article of manufacture" that causes operations to be performed. The applicant's

specification details that the article of manufacture refers to code or logic that is

implemented in hardware logic or a computer readable medium, but the article of

manufacture which the code is implemented may comprise a transmission media,

wherein that media may be signals propagated through space (see par [0057]). As

such, the article of manufacture shows that the claimed subject matter does not meet

the statutory basis and at best appears to be software per se.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 1, 3, 5-6, 37, 39-43, 48, 50-52 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997,

in view of Patterson (US Patent Application No. 2003/0182326) filed March 19,

2002, further in view of Friske (US Patent No. 6,070,170) filed October 1, 1997.

        Regarding Claims 1, 37, and 48, Cannon discloses a data management

method, comprising:

        using an operating system, operating a source volume of a source device

wherein the source volume includes storage, a plurality of user files stored in said

storage and a file system for locating said user files stored in said storage, said

file system including an address table identifying the location of each file on said

storage device, said operating including said operating system locating said user

files in said storage using said file system and said address table of said file

system (column 3, lines 45-50 and column 8, lines 8-16, Cannon)[1];

        backing up contents of the source volume of the source device at a first

client station as at least one object of a database stored in a data storage

subsystem wherein the at least one object represents an image of the contents of

the source volume of the source device (column 13, lines 50-67 and columns 16-

17, lines 55-67 and 1-14, respectively, Cannon);

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[1] Examiner Notes: Details about the locating of user files and address table can be found within Cannon
at col.4, lines 41-46 and col.7, lines 53-66.

using the database, tracking attributes and location of the at least one

object in the database (column 7, lines 53-64 and column 9, lines 31-41,

Cannon);

using the at least one object, restoring the contents of the source volume

of the source device from the at least one object (column 14, lines 1-13 and

column 17, lines 18-44, Cannon). However, Cannon is not as detailed with

respect to restoring the contents to a target file in a file system stored on a

storage device so that the target file contains internally within said target file, said

contents of the source device including said plurality of files and said file directory

of the source device, wherein said file system comprises a plurality of files and

an address table identifying the location of each file on said storage device. On

the other hand, Patterson discloses restoring the contents to a target file in a file

system stored on a storage device so that the target file contains internally within

said target file, image data representing said contents of the source volume

including image data representing both said plurality of files and said file system

of the source volume within said target file ([0049-0052], Patterson). It would

have been obvious to one of ordinary skill in the art at the time of the invention to

incorporate Patterson's teachings into the Cannon system. A skilled artisan

would have been motivated to combine in order to provide a more optimized

system of managing a plurality of different client stations with stored content.

Thereby, allowing for a better backup and restorable service.

Therefore, the combination of Cannon in view of Patterson, disclose

using an operating system, using the target file containing the image data as a file instead of a volume so that the target file is not operated as a volume by an operating system ([0049-0052], Patterson);

copying image data representing the contents of the source volume from the target file to a target volume of a target device so that the target volume contains the restored contents of the source volume (column 14, lines 41-67, Cannon); and

using an operating system, operating the target volume as a volume, including locating said user files in said target volume using said file system of said target volume so that the target volume is operated as a volume instead of a file by an operating system ([0049-0052], Patterson).

However, the combination of Cannon in view of Patterson are not as detailed with respect to the restoring the contents to at least one record of a target file.

On the other hand, Friske discloses restoring the contents to at least one record of a target file (column 6, lines 2-13, Friske).It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Friske's teachings into the Cannon, Patterson, Maurer, and Hutchinson system. A skilled artisan would have been motivated to combine in order to maintain an ongoing environment for data restoration.

Regarding Claims 3, 39, and 50, the combination of Cannon in view of

Patterson, further in view of Friske, disclose the method wherein the target file is

a flat file which contains in a single record of the flat file the image data

representing the complete contents of the source volume (column 6, lines 2-13,

Friske).

Regarding Claims 5, 40, and 51, the combination of Cannon in view of

Patterson, further in view of Friske, disclose the method wherein the data storage

subsystem includes a server coupled to the first client station by a network

(column 4, lines 9-20, Cannon).

Regarding Claims 6, 41, and 52, the combination of Cannon in view of

Patterson, further in view of Friske, disclose the method further comprising, using

the at least one object, restoring the contents of the source device from the at

least one object to a target device so that the target device contains the contents

of the source device (column 14, lines 1-13 and column 17, lines 18-44,

Cannon).

14.   Claims 2, 11, 38, 46, 49, and 57 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in

view of Patterson (US Patent Application No. 2003/0182326) filed March 19, 2002,

further in view of Friske (US Patent No. 6,070,170) filed October 1, 1997, and

further in view of Maurer (US Patent Application No. 20030065780) filed

September 27, 2002.

Regarding Claims 2, 38, and 49, the combination of Cannon in view of

Patterson, further in view of Friske, disclose all of the claimed subject matter as

stated above. However, Cannon, Patterson, and Friske are silent with respect the

target file being stored on storage media at a second client station. On the other

hand, Maurer discloses the target file being stored on storage media at a second

client station ([0108-0109], Maurer). Cannon, Patterson, Friske and Maurer are

analogous art because they are from the same field of endeavor of data

restoration. It would have been obvious to one of ordinary skill in the art at the

time of the invention to incorporate Maurer's teachings into the Cannon,

Patterson, and Friske system. A skilled artisan would have been motivated to

combine in order to store the needed data on an alternate location, such that

if/when one location fails the needed data is not lost, but instead located

elsewhere. As a result, allowing for a better recovery system.

Regarding Claims 11, 46, and 57, the combination of Cannon in view of

Patterson, further in view of Friske, and further in view of Maurer, disclose the

method wherein said target file is a flat file ([0074], Maurer).

15.   **Claims 10, 12, 45, 47, 56, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Patterson (US Patent Application No. 2003/0182326) filed March 19, 2002, further in view of Friske (US Patent No. 6,070,170) filed October 1, 1997, and further in view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002, and further in view of "Logical vs. Physical File System Backup", By: Hutchinson, Published: 1999; referred to hereinafter as 'Hutchinson'.**

Regarding Claims 10, 45, and 56, the combination of Cannon in view of Patterson, further in view of Friske, further in view of Maurer, disclose the method further comprising mounting the source device ([0079], Maurer). However, Cannon in view of Patterson, further in view of Friske, and further in view of Maurer, are silent with respect to the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device. On the other hand, Hutchinson discloses the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device (pg.3, column 2, 1st full paragraph, Hutchinson). Cannon, Patterson, Friske, Maurer, and Hutchinson are analogous art because they are from the same field of endeavor of system backup/restore. It would have been obvious to one of ordinary skill in the art at

the time of the invention to incorporate Hutchinson's teachings into the Cannon,

Patterson, Friske, and Maurer system. A skilled artisan would have been

motivated to combine as suggested by Hutchinson at pg. 2, column 2, in order to

provide system history and increase resilience to disasters, which means that it is

important that the format used to store data must be archival in nature. As a

result, maximizing the speed for data backup and minimizing the resources that

are used in performing the backup.

Regarding Claims 12, 47, and 58, the combination of Cannon in view of

Patterson, further in view of Friske, further in view Maurer, and further in view of

Hutchinson, disclose the method wherein said copying uses the UNIX dd

command (pg.3, 2nd full paragraph, lines 5-9, Hutchinson).

16.   **Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Patterson (US

Patent Application No. 2003/0182326) filed March 19, 2002, further in view of

Maurer (US Patent Application No. 20030065780) filed September 27, 2002, further

in view of "Logical vs. Physical File System Backup", By: Hutchinson, Published:

1999; referred to hereinafter as 'Hutchinson', and further in view of Friske (US

Patent No. 6,070,170) filed October 1, 1997.

Regarding Claim 59, the combination of Cannon in view of Patterson,

further in view of Maurer, and further in view of Hutchinson, disclose a data

management method, comprising:

using an operating system, operating a source volume of a source device

wherein the source volume includes storage, a plurality of user files stored in said

storage and a file system for locating said user files stored in said storage, said

file system including an address table identifying the location of each file on said

storage device, said operating including said operating system locating said user

files in said storage using said file system and said address table of said file

system (column 3, lines 45-50 and column 8, lines 8-16, Cannon)[2];

mounting the source device ([0079], Maurer) as a read only device

wherein write operations to said source device are prevented during backing up

of said source device ([0010], Patterson; further details about the device being

read-only, thus preventing write operations can be found within columns 17-18,

lines 65-67 and 1-23, respectively; Hitz (incorporated by reference into

Patterson));

backing up the complete contents of the source volume of the source

device at a first client station as at least one object of a database stored in a data

storage subsystem which includes a server coupled to the first client station by a

network wherein the at least one object represents an image of the contents of

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[2] Examiner Notes: Details about the locating of user files and address table can be found within Cannon
at col.4, lines 41-46 and col.7, lines 53-66.

the source volume of the source device (column 4, lines 9-20 and column 13,

lines 50-67 and columns 16-17, lines 55-67 and 1-14, respectively, Cannon);

using the database, tracking attributes and location of the at least one

object in the database (column 7, lines 53-64 and column 9, lines 31-41,

Cannon).

However, the combination of the references are not as detailed with

determining that a target device is not available; and in response to said

determination that said target device is not available, using the at least one

object, restoring the contents of the source volume of the source device from the

at least one object to single record of a flat target file in a file system stored on a

storage device at a second client station instead of to a volume being operated

as a volume by an operating system so that the single record of the flat target file

contains internally within said single record of the flat target file.

On the other hand, Friske discloses determining that a target device is not

available (column 2, lines 53-67, Friske); and in response to said determination

that said target device is not available, using the at least one object, restoring the

contents of the source volume of the source device from the at least one object

to a single record of a flat target file in a file system stored on a storage device at

a second client station instead of to a volume being operated as a volume by an

operating system so that the single record of the flat target file contains internally

within said single record of the flat target file (column 6, lines 2-13, Friske). It

would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate Friske's teachings into the Cannon, Patterson, Maurer, and Hutchinson system. A skilled artisan would have been motivated to combine in order to maintain an ongoing environment for data restoration.

Therefore, the combination of Cannon in view of Patterson, further in view of Maurer, further in view of Hutchinson, and further in view of Friske, disclose

using an operating system, using the target file containing the image data as a file instead of a volume so that the target file is not operated as a volume by an operating system ([0049-0052], Patterson);

copying image data representing the complete contents of the source volume from the flat target file to a target volume of said target device when available so that the target volume contains the complete restored contents of the source volume including said plurality of files of the source device and said file directory of the source volume (column 14, lines 41-67, Cannon), using the UNIX dd command (pg.3, 2nd full paragraph, lines 5-9, Hutchinson); and

using an operating system, operating the target volume as a volume, including locating said user files in said target volume using said file system of said target volume so that the target volume is operated as a volume instead of a file by an operating system ([0049-0052], Patterson).

Response to Arguments

Applicant's arguments with respect to the newly amended claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues Maurer fail to teach wherein a target file is a flat file.

Examiner respectfully disagrees. Maurer does in fact disclose the recited feature within dependent claim 11, wherein a map of the logical information to physical devices on the source computer is created in the form of a flat file. Then, the map is used to build a substantially identical logical configuration on the target computer. Since the system allows for the information to be created and stored in the form of a flat file and the flat file format along with the information is backed up from the source computer to the target computer. When the restoring process occurs, the information that has been backed up is still within the flat file formation and is therefore manipulated as such. Also, as an alternative example, paragraph [0102] of the Maurer reference, further disclose using the flat file to map the volume information from one computer system to another. Again, since the information being mapped is within a flat file when the process of backing up the system and restoring the system occurs (paragraphs [0103] and [0110]) the information is maintained in the flat file format.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHELCIE DAYE whose telephone number is (571) 272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
Technology Center 2100
August 12, 2010

/Apu M Mofiz/
Supervisory Patent Examiner, Art Unit 2161